Final 24 tanks removed from watch list

Tri-Party Agreement milestone completed one month early

The Department of Energy Office of River Protection has resolved significant safety issues resulting in the removal of the final 24 Hanford high-level waste tanks from the Wyden congressional safety watch list. Closure of the final safety issue completes a Tri-Party Agreement milestone that is due Sept. 30.

"Getting these tanks off the watch list is the result of years of effort to improve safe storage and to understand the nature of the waste in the tanks," said ORP Manager Harry Boston. "We have confirmed the controls are in place to safely maintain the waste until it is retrieved and treated. This important milestone brings us one step closer to closing the tanks for good. We will continue to monitor the tanks to ensure safe storage of the waste until we can send it to the Waste Treatment Plant."



ORP's Harry Boston, left, joined Congressman Doc Hastings and Sen. Ron Wyden to announce the closure of the watch list.

There are 177 underground tanks in central Hanford that store approximately 53 million gallons of waste from decades of plutonium production. Twenty-eight of the tanks are newer double-shell tanks that can hold more than a million gallons of waste, and the remaining 149 are older single-shell tanks with capacities ranging from 500,000 to a million gallons.

Sen. Ron Wyden of Oregon authored a law in the early 1990s requiring DOE to watchdog the most dangerous underground radioactive waste tanks at the Hanford Site. The law required identification of tanks having the potential for release of high-level waste from uncontrolled increases of temperature and pressure.

Based on these criteria, DOE identified four problem areas that could result in releases of high-level waste: generation of flammable gases; presence of flammable organic chemicals; presence of potentially explosive ferrocyanide; and high heat levels generated by certain types of wastes.

"A decade ago, I responded to the dangerous threat posed by certain nuclear waste storage tanks at Hanford by passing a law to protect the people of the Northwest from possible radioactive tank explosions," Sen. Wyden said at an event in Richland marking the closure of the watch list. "Today, I'm proud to see the watch list become extinct. The hard work of the Department of Energy and many others has helped protect the people of Hanford and communities downstream from the potentially devastating effects of a radioactive explosion."

"I am pleased to join Senator Wyden in celebrating the removal of the last tanks from the watch list," said Congressman Doc Hastings. "Successful removal of all the tanks from the watch list eliminates one of the major risks to the citizens of the Northwest and is another example of the excellent progress the Office of River Protection is making."

Sixty tanks had been added to the watch list since 1991, and 56 was the highest number of tanks on the list at any one time, in May of 1994. DOE resolved the ferrocyanide issue in 1996, the organic chemical issue in 1999 and the high-heat issue in 2000.

Continued on page 4.

Final 24 tanks removed from watch list, cont.

The resolution last January of the flammable gas safety issue removed tank SY-101 — nicknamed Hanford's "burping" tank in the early 1990s. Removal of the remaining 24 tanks was based on analysis of the waste, monitoring of tank conditions and identification of potential hazards.

Ventilation and monitoring of tank conditions and ignition source controls will remain in place on all Hanford tanks until the waste is retrieved and delivered to the Waste Treatment Plant, scheduled to begin hot operations in 2007.

"Our employees have worked hard to improve the conditions in these tanks, not only to remove them from the watch list, but also to make them available for normal operations," said Fran DeLozier, president and general manager of CH2M HILL Hanford Group, ORP's tank-farm contractor. "We're proud of this accomplishment and of our efforts to improve safe storage of waste in the Hanford tanks."

The Tanks Advisory Panel assisted DOE in reviewing the documentation that concluded the safety issues were closed and that the tanks could be removed from the watch list. The panel includes experts in hazardous waste, radioactive materials and waste management. The panel is chaired by Dr. Mujid Kazimi, chairman of the Nuclear Engineering Department at Massachusetts Institute of Technology. •